

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte EDWIN A. MONTIE, JEROEN VAN ENGELSHOVEN,  
and RONALD VAN DER WILK

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Appeal No. 1998-0380  
Application No. 08/518,062

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ON BRIEF

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Before COHEN, ABRAMS, and BARRETT, Administrative Patent Judges.  
COHEN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 3, 5, and 6. These claims constitute all of the claims remaining in the application.

Appellants' invention pertains to a cathode ray tube. A basic understanding of the invention can be derived from a reading of exemplary claim 1, a copy of which appears in the appendix to the main brief (Paper No. 13).

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As evidence of anticipation and obviousness, the examiner has applied the documents listed below:

Hughes                                      3,772,554                                      Nov. 13, 1973

Hawley, R., "Solid Insulators in Vacuum: A Review", Vacuum, vol. 18, number 7, Pergamon Press Ltd., pp 383-390, 1968.

The following rejections are before us for review.

Claims 1, 2, 5, and 6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hughes.

Claims 1, 2, 5, and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hughes.

Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over Hughes in view of Hawley.

The full text of the examiner's rejections and response to the argument presented by appellants appears in the answer (Paper No. 14), while the complete statement of appellants' argument can be found in the main and reply briefs (Paper Nos. 13 and 15).

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As to the grouping of claims (main brief, pages 5 and 6), appellants make it clear that claims 1, 2, and 5 are considered to be separately patentable. Therefore, we shall focus on these claims, infra, while claim 6 shall stand or fall with claims 1 or 2, from which it depends.

#### OPINION

In reaching our conclusion on the issues raised in this appeal, this panel of the board has carefully considered appellants' specification and claims, the applied teachings,<sup>1</sup> and the respective viewpoints of appellants and the examiner. As a consequence of our review, we make the determinations which follow.

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<sup>1</sup> In our evaluation of the applied prior art, we have considered all of the disclosure of each document for what it would have fairly taught one of ordinary skill in the art. See In re Boe, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). Additionally, this panel of the board has taken into account not only the specific teachings, but also the inferences which one skilled in the art would reasonably have been expected to draw from the disclosure. See In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

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The anticipation rejection

We affirm the anticipation rejection of claims 1, 5/1, and 6/1, but reverse the anticipation rejection of claims 2, 5/2, and 6/2.

Anticipation under 35 U.S.C. § 102(b) is established only when a single prior art reference discloses, either expressly or under principles of inherency, each and every element of a claimed invention. See In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997); In re Paulsen, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994); In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990); and RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

Claim 1 is drawn to a cathode ray tube comprising, inter alia, one of first and second prefocusing electrodes protruding toward the other in such a way that the distance between the electrodes at the location of apertures therein is smaller than at the location of the respective securing means thereof, and in that the

electrodes at the location of the apertures provided therein are spaced apart substantially at a distance which is limited by electrostatic breakdown.

As we see it, the content of claim 1 is anticipated by the Hughes teaching. More specifically, we share the examiner's point of view that the above referenced language of claim 1 addresses an inherent feature of the overall in-line electron gun teaching of Hughes (Fig. 3). This panel of the board is of the opinion that the examiner has given a technically sound explanation (answer, page 4) to support an inherency conclusion by pointing out that the distances between the electrodes 29, 31 of Hughes are inherently limited by the electrostatic breakdown since if they were spaced at a distance less than the distance of electrostatic breakdown the electrodes would arc and the electron gun would fail to operate.

We also conclude that the subject matter of claim 5/1 is anticipated by Hughes. It is quite apparent to us that electrode 31 of Hughes is comprised of two parts, as broadly



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set forth in claim 5/1. The rejection of claim 6/1 is sustained since it stands or falls with claim 1 as earlier indicated.

Appellants' argument does not persuade us that the examiner erred in rejecting claims 1, 5/1, and 6/1 under 35 U.S.C.

§ 102(b). As explained above, we concluded that the referenced portion of claim 1 addresses an inherent attribute of the electron gun of Hughes. It is a well established principle that when, as here, there is sound reason to believe that a limitation of a claim is an inherent characteristic of the prior art, it is incumbent upon appellants to prove that the prior art does not possess the characteristic. See In re Swinehart, 439 F.2d 210, 213, 169 USPQ 226, 229 (CCPA 1971).

It follows that, as to claim 1, the arguments of counsel in the main (pages 6 and 7) and reply briefs are not evidence and, further, they are simply not convincing that claim 1 is patentable over the Hughes reference.

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Contrary to the argument related to claim 5 (main brief, pages 7 and 8), the broadly recited "at least two parts" is responded to by at least two integral parts of the electrode 31 of Hughes (Fig. 3).

Turning now to claim 2, it is apparent that the examiner relies upon the drawing alone to support the rejection of this claim as being anticipated by the Hughes teaching. Not being to scale, it is speculative at best as to what Fig. 3 fairly teaches in the matter of distances between electrodes. Thus, the rejection of claim 2, as well as of claims 5/2 and 6/2 dependent thereon, must be reversed.

#### The obviousness rejections

##### *Claims 1, 2, 5, and 6*

We sustain the rejection of claims 1, 5, and 6 under 35 U.S.C. § 103, but reverse the rejection of claim 2 on this same ground.

As explained above, in the rejection of claims 1 and 5/1 under 35 U.S.C. § 102(b), the claimed subject matter is

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anticipated by Hughes. Since anticipation or lack of novelty is the epitome of obviousness we, therefore, also sustain the rejection of claims 1 and 5/1 under 35 U.S.C. § 103. See In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982). The rejection of claim 6/1 under 35 U.S.C. § 103 is sustained since this claim stands or falls with claim 1, as earlier indicated.

The appellants correctly point out (main brief, page 9), in the matter of the obviousness rejection of claim 2, that the examiner has not stated any reason as to why the limitations thereof would have been obvious based upon Hughes.<sup>2</sup> Accordingly, we must reverse the rejection of this claim under 35 U.S.C. § 103.

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<sup>2</sup> As explained earlier, the subject matter of claim 2 is not anticipated by the unscaled drawing of Hughes. The examiner does not rely on the apparent admission that "[i]n most conventional cases, the maximum electric field strength along the supporting body is approximately a factor of three lower than that in the prevailing vacuum" (spec., p. 3, lines 8-9).

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*Claim 3*

We sustain the rejection of claim 3/1 under 35 U.S.C. § 103, but reverse the rejection of claim 3/2 on the same statutory ground.

Like the examiner (answer, page 8), we view appellants' argument (main brief, page 10) specifying component spacing "at their electrostatic breakdown distance", as not commensurate with the claim language on appeal. From our perspective, contrary to appellants' viewpoint, one having ordinary skill in this art would have certainly been expected to establish appropriate electrode distances, as recited in claim 3/1, that avoid the problem of electrostatic breakdown and resulting damage. Our position on this matter presumes skill on the part of those practicing this art, not the converse. See In re Sovish, 769 F.2d 738, 742, 226 USPQ 771, 774 (Fed. Cir. 1985).

In summary, this panel of the board has:

affirmed the rejection of claims 1, 5/1, and 6/1 under

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35 U.S.C. § 102(b) as being anticipated by Hughes, but reversed the rejection of claims 2, 5/2, and 6/2 on this same statutory ground;

affirmed the rejection of claims 1, 5/1, and 6/1 under 35 U.S.C. § 103 as being unpatentable over Hughes, but reversed the rejection of claims 2, 5/2, and 6/2 on this same statutory ground; and

affirmed the rejection of claim 3/1 under 35 U.S.C. § 103 as being unpatentable over Hughes in view of Hawley, but reversed the rejection of claim 3/2 on this same statutory ground.

The decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

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IRWIN CHARLES COHEN	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
NEAL E. ABRAMS	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
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LEE E. BARRETT	)	
Administrative Patent Judge	)	

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APJ ABRAMS

DECISION: AFFIRMED-IN-PART

Prepared By:

**DRAFT TYPED:** 22 Aug 01

**FINAL TYPED:**